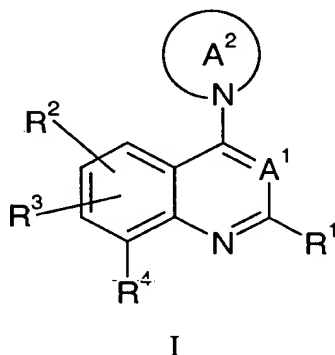


Claims

1. A compound selected from the group consisting of compounds of Formula I



wherein

R¹ is alkyl, cycloalkyl, aralkyl or trifluoroalkyl;

R² is hydrogen, alkyl, alkoxy, hydroxy, halogen, trifluoroalkyl, difluoroalkoxy or trifluoroalkoxy;

R³ is aryl or heteroaryl;

R⁴ is hydrogen;

R⁵ is hydrogen, alkyl or aralkyl;

R⁶ and R⁷ are each independently hydrogen or alkyl;

A¹ is CH or N;

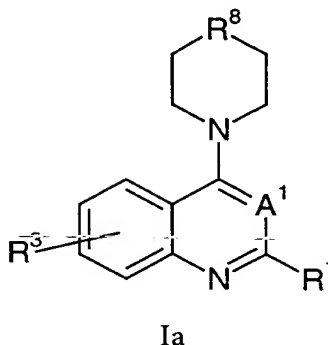
A² is a 4- to 10- membered heterocyclic ring optionally substituted with alkyl, hydroxy, alkoxy, alkoxyalkyl, alkoxyalkoxy, hydroxyalkoxy, -COOR⁵ or -CONR⁶R⁷;

pharmaceutically acceptable salts of compounds of Formula I, pharmaceutically acceptable solvates of compounds of Formula I and pharmaceutically acceptable esters of compounds of Formula I.

2. The compound according to claim 1, wherein R² is hydrogen.
3. The compound according to claim 1, wherein R¹ is alkyl.
4. The compound according to claim 3, wherein R¹ is methyl.

5. The compound according to claim 1, wherein R^3 is attached at the 7-position of the quinoline or quinazoline ring.
6. The compound according to claim 1, wherein A^1 is CH.
7. The compound according to claim 1, wherein A^1 is N.
8. The compound according to claim 1, wherein R^3 is unsubstituted phenyl, thiophenyl, pyridinyl, pyrimidinyl, 1H-indolyl, benzofuryl, benzothiophenyl or naphthyl or R^3 is phenyl, thiophenyl, pyridinyl, pyrimidinyl, 1H-indolyl, benzofuryl, benzothiophenyl or naphthyl, substituted with one to three substituents each independently selected from halogen, trifluoromethyl, amino, alkoxy, methylenedioxy, alkylcarbonyl, cyano, alkyl, nitro, hydroxy, trifluoromethoxy, alkylsulfanyl, alkenyl, alkoxycarbonyl, aryloxy, alkoxycarbonylamino, alkylcarbonylamino and aminocarbonyl.
9. The compound according to claim 8, wherein R^3 is unsubstituted thiophenyl, pyridinyl or naphthyl or R^3 is phenyl or thiophenyl substituted with one or two substituents each independently selected from halogen, trifluoromethyl, alkoxy, alkylcarbonyl, cyano and hydroxy.
10. The compound according to claim 8, wherein A^2 is a 4- to 10- membered heterocyclic ring optionally substituted with alkyl.
11. The compound according to claim 10, wherein A^2 is a pyrrolidine, piperidine, morpholine, piperazine, 3,4-dihydro-1H-isoquinoline or azepane ring, wherein these rings are optionally substituted with alkyl.
12. The compound according to claim 11, selected from the group consisting of 4-(3,4-dihydro-1H-isoquinolin-2-yl)-2-methyl-7-(3-trifluoromethyl-phenyl)-quinoline, pharmaceutically acceptable salts thereof and pharmaceutically acceptable esters thereof.
13. The compound according to claim 12, which is 4-(3,4-dihydro-1H-isoquinolin-2-yl)-2-methyl-7-(3-trifluoromethyl-phenyl)-quinoline.

14. A compound selected from the group consisting of compounds of Formula Ia



wherein

R¹ is lower alkyl;

R³ is aryl or heteroaryl attached at the 5, 6 or 7-position of the quinoline or quinazoline ring;

A¹ is CH or N;

R⁸ is a bond, lower alkyl, O, N or N-alkyl;

pharmaceutically acceptable salts of compounds of Formula Ia, and

pharmaceutically acceptable esters of compounds of Formula Ia.

15. The compound according to claim 14, wherein R³ is unsubstituted phenyl, thiophenyl, pyridinyl, pyrimidinyl, 1H-indolyl, benzofuryl, benzothiophenyl or naphthyl or R³ is phenyl, thiophenyl, pyridinyl, pyrimidinyl, 1H-indolyl, benzofuryl, benzothiophenyl or naphthyl, substituted with one to three substituents each independently selected from halogen, trifluoromethyl, amino, alkoxy, methylenedioxy, alkylcarbonyl, cyano, alkyl, nitro, hydroxy, trifluoromethoxy, alkylsulfanyl, alkenyl, alkoxy carbonyl, aryloxy, alkoxy carbonylamino, alkylcarbonylamino and aminocarbonyl.
16. The compound according to claim 15, wherein A¹ is CH.

17. The compound according to claim 16, wherein R³ is attached at the 7-position of the quinoline ring.
18. The compound according to claim 17, wherein R⁸ is a bond.
19. The compound according to claim 18, wherein R³ is an unsubstituted group selected from the group consisting of phenyl, thiophenyl, pyridinyl, pyrimidinyl, 1H-indolyl, benzofuryl, benzothiophenyl and naphthyl.
20. The compound according to claim 19, selected from the group consisting of 2-methyl-7-phenyl-4-pyrrolidin-1-yl-quinoline, pharmaceutically acceptable salts thereof and pharmaceutically acceptable esters thereof.
21. The compound according to claim 20, which is 2-methyl-7-phenyl-4-pyrrolidin-1-yl-quinoline.
22. The compound according to claim 19, selected from the group consisting of 2-methyl-4-pyrrolidin-1-yl-7-thiophen-2yl-quinoline, pharmaceutically acceptable salts thereof and pharmaceutically acceptable esters thereof.
23. The compound according to claim 22, which is 2-methyl-4-pyrrolidin-1-yl-7-thiophen-2yl-quinoline.
24. The compound according to claim 19, selected from the group consisting of 2-methyl-7-pyridin-3-yl-4-pyrrolidin-1-yl-quinoline, pharmaceutically acceptable salts thereof and pharmaceutically acceptable esters thereof.
25. The compound according to claim 24, which is 2-methyl-7-pyridin-3-yl-4-pyrrolidin-1-yl-quinoline.
26. The compound according to claim 19, selected from the group consisting of 2-methyl-7-pyrimidin-5-yl-4-pyrrolidin-1-yl-quinoline, pharmaceutically acceptable salts thereof and pharmaceutically acceptable esters thereof.

27. The compound according to claim 26, which is 2-methyl-7-pyrimidin-5-yl-4-pyrrolidin-1-yl-quinoline.
28. The compound according to claim 18, wherein R³ is selected from the group consisting of phenyl, thiophenyl, pyridinyl, pyrimidinyl, 1H-indolyl, benzofuryl, benzothiophenyl and naphthyl, and is substituted with one to three substituents; wherein each substituent is selected from the group consisting of halogen, trifluoromethyl, amino, alkoxy, methylenedioxy, alkylcarbonyl, cyano, alkyl, nitro, hydroxy, trifluoromethoxy, alkylsulfanyl, alkenyl, alkoxycarbonyl, aryloxy, alkoxycarbonylamino, alkylcarbonylamino and aminocarbonyl.
29. The compound according to claim 28, selected from the group consisting of 7-(3-chloro-phenyl)-2-methyl-4-pyrrolidin-1-yl-quinoline, pharmaceutically acceptable salts thereof and pharmaceutically acceptable esters thereof.
30. The compound according to claim 29, which is 7-(3-chloro-phenyl)-2-methyl-4-pyrrolidin-1-yl-quinoline.
31. The compound according to claim 28, selected from the group consisting of 2-methyl-4-pyrrolidin-1-yl-7-(3-trifluoromethyl-phenyl)-quinoline, pharmaceutically acceptable salts thereof and pharmaceutically acceptable esters thereof.
32. The compound according to claim 31, which is 2-methyl-4-pyrrolidin-1-yl-7-(3-trifluoromethyl-phenyl)-quinoline.
33. The compound according to claim 28, selected from the group consisting of 3-(2-methyl-4-pyrrolidin-1-yl-quinoline-7-yl)-phenylamine, pharmaceutically acceptable salts thereof and pharmaceutically acceptable esters thereof.
34. The compound according to claim 33, which is 3-(2-methyl-4-pyrrolidin-1-yl-quinoline-7-yl)-phenylamine.

35. The compound according to claim 28, selected from the group consisting of 1-[4-(2-methyl-4-pyrrolidin-1-yl-quinoline-7-yl)-phenyl]-ethanone, pharmaceutically acceptable salts thereof and pharmaceutically acceptable esters thereof.
36. The compound according to claim 35, which is 1-[4-(2-methyl-4-pyrrolidin-1-yl-quinoline-7-yl)-phenyl]-ethanone.
37. The compound according to claim 28, selected from the group consisting of 7-(4-methoxy-phenyl)-2-methyl-4-pyrrolidin-1-yl-quinoline, pharmaceutically acceptable salts thereof and pharmaceutically acceptable esters thereof.
38. The compound according to claim 37, which is 7-(4-methoxy-phenyl)-2-methyl-4-pyrrolidin-1-yl-quinoline.
39. The compound according to claim 17, wherein R^8 is O.
40. The compound according to claim 39, selected from the group consisting of 2-methyl-4-morpholin-4-yl-7-(3-trifluoromethyl-phenyl)-quinoline, pharmaceutically acceptable salts thereof and pharmaceutically acceptable esters thereof.
41. The compound according to claim 40, which is 2-methyl-4-morpholin-4-yl-7-(3-trifluoromethyl-phenyl)-quinoline.
42. The compound according to claim 39, selected from the group consisting of 1-[4-(2-methyl-4-morpholin-4-yl-quinolin-7-yl)-phenyl]-ethanone, pharmaceutically acceptable salts thereof and pharmaceutically acceptable esters thereof.
43. The compound according to claim 42, which is 1-[4-(2-methyl-4-morpholin-4-yl-quinolin-7-yl)-phenyl]-ethanone.
44. The compound according to claim 17, wherein R^8 is N.
45. The compound according to claim 17, wherein R^8 is N-alkyl.

46. The compound according to claim 45, selected from the group consisting of 2-methyl-4-(4-methyl-piperazin-1-yl)-7-(3-trifluoromethyl-phenyl)-quinoline, pharmaceutically acceptable salts thereof and pharmaceutically acceptable esters thereof.
47. The compound according to claim 46, which is 2-methyl-4-(4-methyl-piperazin-1-yl)-7-(3-trifluoromethyl-phenyl)-quinoline.
48. The compound according to claim 17, wherein R^8 is lower alkyl.
49. The compound according to claim 48, wherein R^8 and R^9 together form a methyl group.
50. The compound according to claim 49, wherein R^3 is an unsubstituted group selected from the group consisting of phenyl, thiophenyl, pyridinyl, pyrimidinyl, 1H-indolyl, benzofuryl, benzothiophenyl and naphthyl.
51. The compound according to claim 50, selected from the group consisting of 2-methyl-4-piperidin-1-yl-7-thiophen-2-yl-quinoline, pharmaceutically acceptable salts thereof and pharmaceutically acceptable esters thereof.
52. The compound according to claim 51, which is 2-methyl-4-piperidin-1-yl-7-thiophen-2-yl-quinoline.
53. The compound according to claim 50, selected from the group consisting of 2-methyl-7-phenyl-4-piperidin-1-yl-quinoline, pharmaceutically acceptable salts thereof and pharmaceutically acceptable esters thereof.
54. The compound according to claim 53, which is 2-methyl-7-phenyl-4-piperidin-1-yl-quinoline.
55. The compound according to claim 50, selected from the group consisting of 7-(1H-indol-5-yl)-2-methyl-4-piperidin-1-yl-quinoline, pharmaceutically acceptable salts thereof and pharmaceutically acceptable esters thereof.

56. The compound according to claim 55, which is 7-(1H-indol-5-yl)-2-methyl-4-piperidin-1-yl-quinoline.
57. The compound according to claim 50, selected from the group consisting of 2-methyl-4-piperidin-1-yl-7-pyridin-3-yl-quinoline, pharmaceutically acceptable salts thereof and pharmaceutically acceptable esters thereof.
58. The compound according to claim 57, which is 2-methyl-4-piperidin-1-yl-7-pyridin-3-yl-quinoline.
59. The compound according to claim 49, wherein R³ is selected from the group consisting of phenyl, thiophenyl, pyridinyl, pyrimidinyl, 1H-indolyl, benzofuryl, benzothiophenyl and naphthyl, and is substituted with one to three substituents; wherein each substituent is selected from the group consisting of halogen, trifluoromethyl, amino, alkoxy, methylenedioxy, alkylcarbonyl, cyano, alkyl, nitro, hydroxy, trifluoromethoxy, alkylsulfanyl, alkenyl, alkoxycarbonyl, aryloxy, alkoxycarbonylamino, alkylcarbonylamino and aminocarbonyl.
60. The compound according to claim 59, selected from the group consisting of 2-methyl-4-piperidin-1-yl-7-(3-trifluoromethyl-phenyl)-quinoline, pharmaceutically acceptable salts thereof and pharmaceutically acceptable esters thereof.
61. The compound according to claim 60, which is 2-methyl-4-piperidin-1-yl-7-(3-trifluoromethyl-phenyl)-quinoline.
62. The compound according to claim 59, selected from the group consisting of 7-(3-chloro-phenyl)-2-methyl-4-piperidin-1-yl-quinoline, pharmaceutically acceptable salts thereof and pharmaceutically acceptable esters thereof.
63. The compound according to claim 62, which is 7-(3-chloro-phenyl)-2-methyl-4-piperidin-1-yl-quinoline.

64. The compound according to claim 59, selected from the group consisting of 1-[4-(2-methyl-4-piperidin-1-yl-quinolin-7-yl)-phenyl]-ethanone, pharmaceutically acceptable salts thereof and pharmaceutically acceptable esters thereof.
65. The compound according to claim 64, which is 1-[4-(2-methyl-4-piperidin-1-yl-quinolin-7-yl)-phenyl]-ethanone.
66. The compound according to claim 59, selected from the group consisting of 3-(2-methyl-4-piperidin-1-yl-quinolin-7-yl)-phenylamine, pharmaceutically acceptable salts thereof and pharmaceutically acceptable esters thereof.
67. The compound according to claim 66, which is 3-(2-methyl-4-piperidin-1-yl-quinolin-7-yl)-phenylamine.
68. The compound according to claim 59, selected from the group consisting of 7-(4-methoxy-phenyl)-2-methyl-4-piperidin-1-yl-quinoline, pharmaceutically acceptable salts thereof and pharmaceutically acceptable esters thereof.
69. The compound according to claim 68, which is 7-(4-methoxy-phenyl)-2-methyl-4-piperidin-1-yl-quinoline.
70. The compound according to claim 48, wherein R⁸ is an ethyl group.
71. The compound according to claim 70, wherein R³ is an unsubstituted group selected from the group consisting of phenyl, thiophenyl, pyridinyl, pyrimidinyl, 1H-indolyl, benzofuryl, benzothiophenyl and naphthyl.
72. The compound according to claim 70, wherein R³ is selected from the group consisting of phenyl, thiophenyl, pyridinyl, pyrimidinyl, 1H-indolyl, benzofuryl, benzothiophenyl and naphthyl, and is substituted with one to three substituents; wherein each substituent is selected from the group consisting of halogen, trifluoromethyl, amino, alkoxy, methylenedioxy, alkylcarbonyl, cyano, alkyl, nitro, hydroxy, trifluoromethoxy, alkylsulfanyl, alkenyl, alkoxycarbonyl, aryloxy, alkoxycarbonylamino, alkylcarbonylamino and aminocarbonyl.

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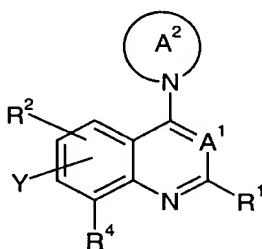
85. The compound according to claim 84, selected from the group consisting of 5-(3-chloro-phenyl)-2-methyl-4-pyrrolidin-1-yl-quinoline, pharmaceutically acceptable salts thereof and pharmaceutically acceptable esters thereof.
86. The compound according to claim 85, which is 5-(3-chloro-phenyl)-2-methyl-4-pyrrolidin-1-yl-quinoline.
87. The compound according to claim 83, wherein R^8 is O.
88. The compound according to claim 87, selected from the group consisting of 5-(3-chloro-phenyl)-2-methyl-4-morpholin-4-yl-quinoline, pharmaceutically acceptable salts thereof and pharmaceutically acceptable esters thereof.
89. The compound according to claim 88, which is 5-(3-chloro-phenyl)-2-methyl-4-morpholin-4-yl-quinoline.
90. The compound according to claim 83, wherein R^8 is N.
91. The compound according to claim 83, wherein R^8 is N-alkyl.
92. The compound according to claim 83, wherein R^8 is lower alkyl.
93. The compound according to claim 92, selected from the group consisting of 5-(3-chloro-phenyl)-2-methyl-4-piperidin-1-yl-quinoline, pharmaceutically acceptable salts thereof and pharmaceutically acceptable esters thereof.
94. The compound according to claim 93, which is 5-(3-chloro-phenyl)-2-methyl-4-piperidin-1-yl-quinoline.
95. The compound according to claim 92, selected from the group consisting of 2-methyl-4-piperidin-1-yl-5-(3-trifluoromethyl-phenyl)-quinoline, pharmaceutically acceptable salts thereof and pharmaceutically acceptable esters thereof.

96. The compound according to claim 95, which is 2-methyl-4-piperidin-1-yl-5-(3-trifluoromethyl-phenyl)-quinoline.
97. The compound according to claim 15, wherein A¹ is N.
98. The compound according to claim 97, wherein R³ is attached at the 7-position of the quinoline ring.
99. The compound according to claim 98, wherein R⁸ is a bond.
100. The compound according to claim 99, selected from the group consisting of 2-methyl-7-pyrimidin-5-yl-4-pyrrolidin-1-yl-quinazoline, pharmaceutically acceptable salts thereof and pharmaceutically acceptable esters thereof.
101. The compound according to claim 100, which is 2-methyl-7-pyrimidin-5-yl-4-pyrrolidin-1-yl-quinazoline.
102. The compound according to claim 99, selected from the group consisting of 2-methyl-4-pyrrolidin-1-yl--7-(3-trifluoromethyl-phenyl)-quinazoline, pharmaceutically acceptable salts thereof and pharmaceutically acceptable esters thereof.
103. The compound according to claim 102, which is 2-methyl-4-pyrrolidin-1-yl--7-(3-trifluoromethyl-phenyl)-quinazoline.
104. The compound according to claim 99, selected from the group consisting of 7-(3-chloro-phenyl)-2-methyl-4-pyrrolidin-1-yl-quinazoline, pharmaceutically acceptable salts thereof and pharmaceutically acceptable esters thereof.
105. The compound according to claim 104, which is 7-(3-chloro-phenyl)-2-methyl-4-pyrrolidin-1-yl-quinazoline.
106. The compound according to claim 98, wherein R⁸ is O.
107. The compound according to claim 98, wherein R⁸ is N.

108. The compound according to claim 98, wherein R⁸ is N-alkyl.
109. The compound according to claim 98, wherein R⁸ is lower alkyl.
110. The compound according to claim 109, wherein R⁸ is a methyl group.
111. The compound according to claim 110, selected from the group consisting of 2-methyl-4-piperidin-1-yl-7-(3-trifluoromethyl-phenyl)-quinazoline, pharmaceutically acceptable salts thereof and pharmaceutically acceptable esters thereof.
112. The compound according to claim 111, which is 2-methyl-4-piperidin-1-yl-7-(3-trifluoromethyl-phenyl)-quinazoline.
113. The compound according to claim 110, selected from the group consisting of 7-(4-methoxy-phenyl)-2-methyl-4-piperidin-1-yl-quinazoline, pharmaceutically acceptable salts thereof and pharmaceutically acceptable esters thereof.
114. The compound according to claim 113, which is 7-(4-methoxy-phenyl)-2-methyl-4-piperidin-1-yl-quinazoline.
115. The compound according to claim 110, selected from the group consisting of 3-(2-methyl-4-piperidin-1-yl-quinazolin-7-yl)-phenylamine, pharmaceutically acceptable salts thereof and pharmaceutically acceptable esters thereof.
116. The compound according to claim 115, which is 3-(2-methyl-4-piperidin-1-yl-quinazolin-7-yl)-phenylamine.
117. The compound according to claim 110, selected from the group consisting of 2-methyl-4-piperidin-1-yl-7-pyridin-3-yl-quinazoline, pharmaceutically acceptable salts thereof and pharmaceutically acceptable esters thereof.
118. The compound according to claim 117, which is 2-methyl-4-piperidin-1-yl-7-pyridin-3-yl-quinazoline.

119. The compound according to claim 110, selected from the group consisting of 7-(3-chloro-phenyl)-2-methyl-4-piperidin-1-yl-quinazoline, pharmaceutically acceptable salts thereof and pharmaceutically acceptable esters thereof.
120. The compound according to claim 119, which is 7-(3-chloro-phenyl)-2-methyl-4-piperidin-1-yl-quinazoline.
121. The compound according to claim 109, wherein R^8 is an ethyl group.
122. The compound according to claim 121, selected from the group consisting of 4-azepan-1-yl-2-methyl-7-(3-trifluoromethyl-phenyl)-quinazoline, pharmaceutically acceptable salts thereof and pharmaceutically acceptable esters thereof.
123. The compound according to claim 122, which is 4-azepan-1-yl-2-methyl-7-(3-trifluoromethyl-phenyl)-quinazoline.
124. The compound according to claim 97, wherein R^3 is attached at the 6-position of the quinoline ring.
125. The compound according to claim 124, wherein R^8 is a bond.
126. The compound according to claim 124, wherein R^8 is O.
127. The compound according to claim 124, wherein R^8 is N.
128. The compound according to claim 124, wherein R^8 is N-alkyl.
129. The compound according to claim 124, wherein R^8 is lower alkyl.
130. The compound according to claim 97, wherein R^3 is attached at the 5-position of the quinoline ring.
131. The compound according to claim 130, wherein R^8 is a bond.

132. The compound according to claim 130, wherein R^8 is O.
133. The compound according to claim 130, wherein R^8 is N.
134. The compound according to claim 130, wherein R^8 is N-alkyl.
135. The compound according to claim 130, wherein R^8 is lower alkyl.
136. A process for the preparation of a compound according to claim 1, comprising one of the following reactions:
 - a) a reaction of a compound of formula



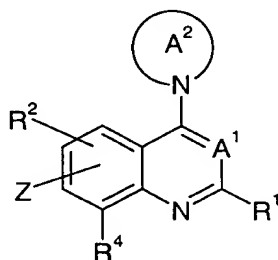
IIIa

with a compound of formula



or

- b) a reaction of a compound of formula



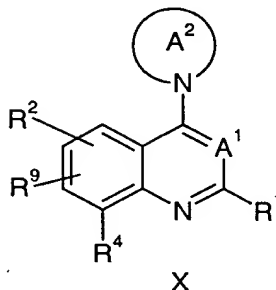
IIIb

with a compound of formula



wherein R^1 , R^2 , R^3 , R^4 , A^1 and A^2 are defined as in claim 1 and Y and Z are substituents which can be used in transition metal catalysed cross coupling reactions.

137. A compound selected from the group of compounds defined by formula X



wherein R¹, R², R⁴, A¹ and A² are defined as in claim 1 and R⁹ is iodine, bromine, chlorine, methylsulfonyloxy, trifluoromethylsulfonyloxy, phenylsulfonyloxy or p-tosylsulfonyloxy.

138. A pharmaceutical composition comprising a compound according to claim 1 and a therapeutically inert carrier.
139. A method for the treatment and prophylaxis of arthritis, cardiovascular diseases, diabetes, renal failure, eating disorders and obesity, which method comprises administering a therapeutically effective amount of a compound according to claim 1.
140. A method of treating obesity in a human in need of such treatment, comprising administration to the human a therapeutically effective amount of a compound according to claim 1 and a therapeutically effective amount of a lipase inhibitor.
141. The method according to claim 140, wherein the lipase inhibitor is orlistat.
142. The method according to claim 140, wherein the compound according to claim 1 and the lipase inhibitor are administered simultaneously.
143. The method according to claim 140, wherein the compound according to claim 1 and the lipase inhibitor are administered separately.
144. The pharmaceutical composition according to claim 138 further comprising a therapeutically effective amount of a lipase inhibitor.

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